PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF OPTICOM PRE-EMPTION FOR THE NORTHBOUND DIRECTION AT THE INTERSECTION OF MD 424 AND MD 450 IN ANNE ARUNDEL COUNTY. ALL YELLOW FACED VEHICULAR TRAFFIC SIGNAL HEADS WILL BE UPGRADED TO BLACK FACED LED. MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

THE INTERSECTION OPERATES IN A NEMA EIGHT-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE/PERMISSIVE LEFT TURN PHASING FOR ALL APPROACHES. THIS OPERATION WILL REMAIN AND A NORTHBOUND PRE-EMPTION PHASE WILL BE ADDED.

CONTROLLER REQUIREMENTS

THE EXISTING POLE MOUNTED CONTROLLER, LOOP DETECTOR AMPLIFIERS AND ASSOCIATED INTERFACE SHALL REMAIN. INSTALL A DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764 IN THE EXISTING CABINET.

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

Ms. Kimberly Tran Assistant District Engineer - Traffic Phone: 410-841-1003

Mr. John Mays District Utility Engineer Phone: 410-841-1005

Mr. Charles George Assistant District Engineer - Maintenance Phone: 410-841-1002

Mr. Edward Rodenhizer Chief, SHA Traffic Signal Shop Phone: 410-787-7650

Mr. Richard L. Daff Sr. Chief, Traffic Operations Division Phone: 410-787-7630

The Power Company Representative is: BALTIMORE GAS & ELECTRIC COMPANY 7317 PARKWAY DRIVE SOUTH HANOVER, MD 21076 Phone: 410-859-9062

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	<u>QUANTITY</u>	DESCRIPTION
9571	72 SF	[UPDATED] SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN:
		I EACH - ASSOCIATED SHIELD ASSEMBLY "WEST, MD 450, RIGHT ARROW" (30 IN. X 51 IN.) POLE MOUNT
		I EACH - ASSOCIATED SHIELD ASSEMBLY "EAST, MD 450, LEFT ARROW" (48 IN. X 75 IN.) POLE MOUNT
		I EACH - ASSOCIATED SHIELD ASSEMBLY "EAST, MD 450, RIGHT ARROW" (30 IN. X 51 IN.) POLE MOUNT
		I EACH - ASSOCIATED SHIELD ASSEMBLY "WEST, MD 450, LEFT ARROW" (48 IN. X 75 IN.) POLE MOUNT
	•	

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

<u>QUANTITY</u> **DESCRIPTION**

ALL REMOVED EQUIPMENT SHALL BECOME PROPERTY OF THE CONTRACTOR.

EQUIPMENT LIST 'B'

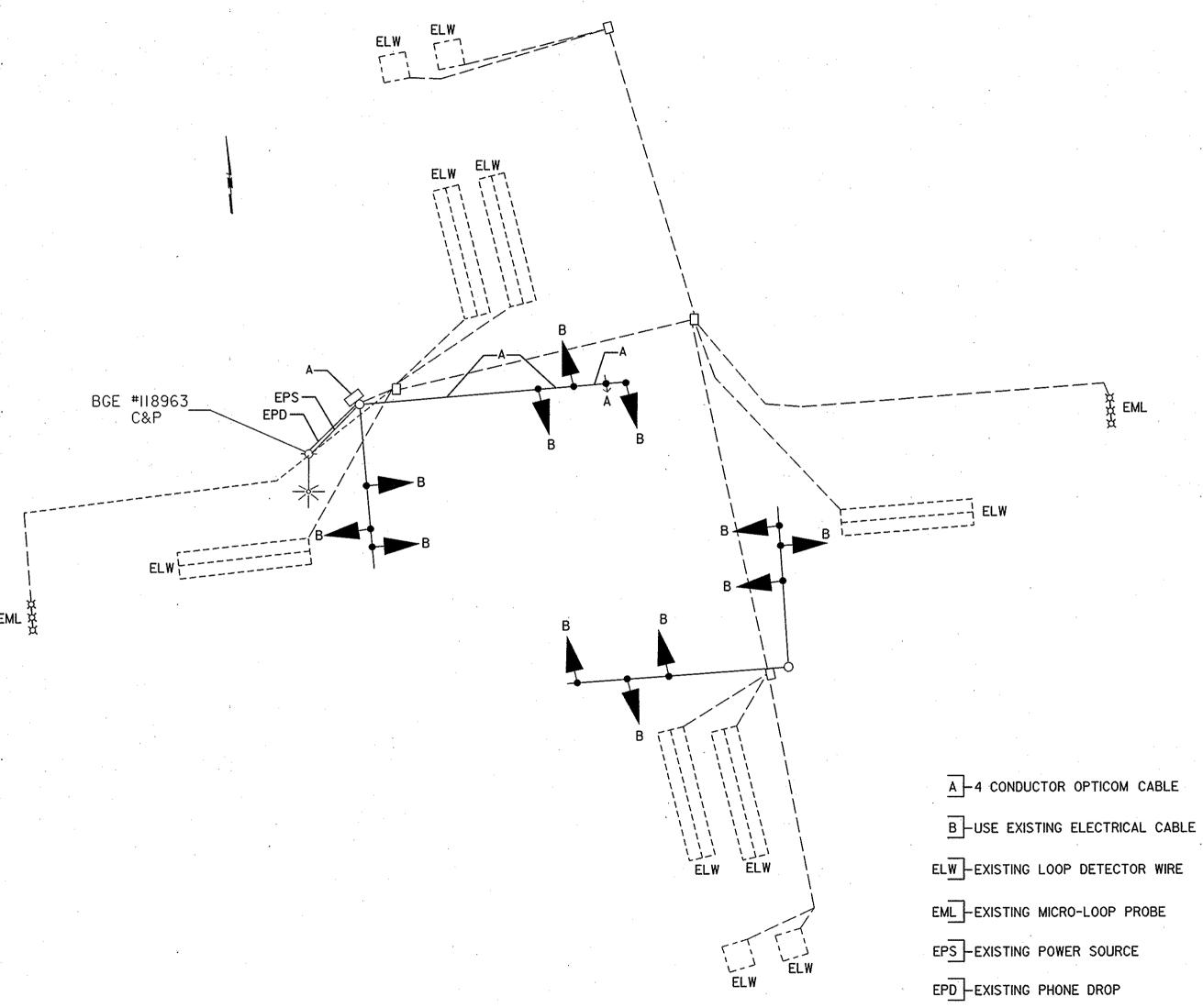
EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	I EA	MAINTENANCE OF TRAFFIC
8002	24 EA	12 INCH RED OR GREEN LED SIGNAL HEAD SECTION
8003	16 EA	12 INCH YELLOW LED SIGNAL HEAD SECTION
8008	I EA	3M OPTICOM #764 DISCRIMINATOR MODULE
8009	2 EA	3M OPTICOM EMITTER SYSTEM 700 SERIES, VISIBLE LIGHT FILTER AND HARDWARE
8011	I2 EA	8 INCH LED SIGNAL (R,Y,G) HEAD SECTION
8028	I EA	REMOVE AND DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8033	90 LF	4 CONDUCTOR OPTICOM DETECTOR CABLE
8064	72 SF	INSTALL OVERHEAD SIGN
8066	I EA	OPTICOM NO. 721 DETECTOR EYE

PHASE CHART

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		(C)	® © ®		(C)(C)(C)(C)(C)(C)(C)(C)(C)(C)(C)(C)(C)(©©©	6 8	66	(D)(G)		(C)(C)(C)(C)(C)(C)(C)(C)(C)(C)(C)(C)(C)(0000	
PHASE I AND 5	G R	G R	R	G R	G R	R	R	R	R	R	R	R	<u> </u>
PHASE I AND 5 CHANGE		THE C	ONTROLL	ER MAY	SKIP T	O PHAS	E I AND	6, 2 AN	1D 5, OF	R 2 AND	6		H
PHASE I AND 6	-6 6	-6 6	G	R	R	R	R	R	R	R	R	R	F F
PHASE I CHANGE	- ¥ G	+ ¥G	G	, R	R	R	R	R	R ´	R	R	R	
PHASE 2 AND 5	R	R	R	-6 -6	• 6	G	R	R	R	R	R	R	
PHASE 5 CHANGE	R	R	R	++ G	¥ G	G	R	R	R	R	R	R	<u> </u>
PHASE 2 AND 6	G	G	G.	G	G	G	R	R	R	R	Ŕ	R] +
PHASE 2 AND 6 CHANGE	Y	Y	Υ	Y	Υ	Y	R	R	R	R	R	R	
PHASE 3 AND 7	R	R	R	R	R	R	G R	G R	R	-6 R	-6 R	R	
PHASE 3 AND 7 CHANGE	THE CONTROLLER MAY SKIP TO PHASE 3 AND 8, 4 AND 7, OR 4 AND 8												
PHASE 3 AND 8	R	R	R	R	R	·R	-6 6	66	G	R	R	R]
PHASE 3 CHANGE	R	R	R	R	R	R	Y G	+ Y G	G	R	R	R	
PHASE 4 AND 7	R	R	R	R	R	R	R	R	R	-6 C	-6 G	G	
PHASE 7 CHANGE	R	R	R	R	R	R	R	R	R		-X C	G	<u> </u>
PHASE 4 AND 8	R.	R	R	R	R	, R	G	G	G	G	G	G	-
PHASE 4 AND 8 CHANGE	R	R	R	R	R	R.	Υ	Y	Y,	Y	Y	Υ	
PRE-EMPT PHASE 4+8	R	R	R	R	R	R	G	G	G	G	G	G]
PRE-EMPT PHASE 4+8 CHANGE	R	R	R	R	R	R	Υ	Υ	Y	Υ	Υ	Υ	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	† \$

WIRING DIAGRAM



-OPTICOM NO. 72I DETECTOR EYE

TOD No: AT782-14 SHA: AA445A51/B51



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 424 (DAVIDSONVILLE ROAD) AND MD 450 (DEFENSE HIGHWAY)

GENERAL INFORMATION SHEET

SCALE1" = 20'	DATE	10 /2005 CON	TRACT NO. AT7825185
DESIGNED BY	SBS	COUNTY	ANNE ARUNDEL
DRAWN BY	SBS	LOGMILE _	02042405.85
CHECKED BY	BAB	T.I.M.S.	NO. <u>G931</u>
F.A.P. NO		TOD NO	

DRAWING NO.

TS-865E OF

SHEET NO. 2 OF 2

STV Incorporated

engineers / architects / planners / scientists / construction managers

7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-9112

PLOTTED: MONDAY, OCTOBER 24, 2005 AT 02:25 PM FILE: I:\PROJECTS\11103\74\01 - MD 424 AT MD 450\G931GI01.DGN